

Abstract

An electrical energy meter comprises an electrically insulating housing (10) for securing relative to least
5 two mains cables (22,24) each having a conductive core surrounded by a sheath of insulating material. The housing includes respective electrical contacts for piercing the insulating sheath of each cable, a current probe for measuring current flowing in at least one of
10 the cables, and circuit means for calculating and displaying electrical energy as a function of the voltage across the contacts and the output of the current probe. An improved current probe is employed comprising a series of Rogowski coils equally spaced
15 around the circumference of a circle, with the gap between two adjacent coils permitting the current-carrying conductor to be introduced into the loop. An alternative current probe employs two such concentric loops of coils, enabling compensation for the effects
20 of external current source pickup.